

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) A scrubber for the cleaning of gases, comprising:

a scrubber tower;

a plurality of scrubber stages, each arranged in the scrubber tower with different ones of the plurality of scrubber stages at different levels above each other in the scrubber tower, at least one of the plurality of scrubber stages above a lowest one of said plurality of scrubber stages comprises a ring-shaped fluid storage tank arranged inside the scrubber tower and is arranged surrounding a central channel through which the gas that is to be cleaned can pass upwards; [[and]]

a separation trough at the bottom of each of the plurality of stages of the scrubber above the lowest one of the plurality of scrubber stages and arranged separating the fluid from the upwards flowing gas, the separation trough having obliquely placed laminae leading the fluid that arrives from one of the plurality of scrubber stages disposed above the separation trough to trough channels arranged under the laminae that lead

the fluid onwards to the corresponding ring-shaped fluid storage tank;

a pump tank at each of the plurality of scrubber stages above the lowest one of the plurality of scrubber stages and arranged at an outer surface of the scrubber tower, the pump tank being connected directly to the corresponding ring-shaped fluid storage tank through a connection in the outer surface of the scrubber tower; and

a circulation pump connected to the corresponding pump tank at a level of each of the plurality of scrubber stages and arranged to feed, through a feed pipe present in the corresponding pump tank, fluid from the corresponding ring-shaped fluid storage tank at the bottom of the scrubber stage to spray beams arranged at the upper part of the scrubber stage for distribution over the cross-section of the scrubber in a direction against the up-wards gas flow,

wherein the separation trough is recessed within and surrounded by the ring-shaped fluid storage tank, and a length of the feed pipe is limited to a height of the scrubber stage.

2. (Previously Presented) The scrubber according to claim 1, wherein each of the plurality of scrubber stages above the lowest of the plurality of scrubber stages comprises the ring-shaped fluid storage tank located inside of the scrubber tower.

3-9. (Canceled)

10. (Currently Amended) The scrubber according to claim [[3]] 1, wherein the feed pipe feeding the fluid to the spray beams is located inside [[an]] the outer surface of the scrubber tower.

11-15. (Canceled)

16. (New) A scrubber for the cleaning of gases, comprising:

a scrubber tower;

a plurality of scrubber stages, each arranged in the scrubber tower with different ones of the plurality of scrubber stages at different levels above each other in the scrubber tower, at least one of the plurality of scrubber stages above a lowest one of said plurality of scrubber stages comprises a ring-shaped fluid storage tank arranged inside the scrubber tower and is arranged surrounding a central channel through which the gas that is to be cleaned can pass upwards;

a separation trough at the bottom of each of the plurality of stages of the scrubber above the lowest one of the plurality of scrubber stages and arranged separating the fluid from the upwards flowing gas, the separation trough having

obliquely placed laminae leading the fluid that arrives from one of the plurality of scrubber stages disposed above the separation trough to trough channels arranged under the laminae that lead the fluid onwards to the corresponding ring-shaped fluid storage tank;

a pump tank at each of the plurality of scrubber stages above the lowest one of the plurality of scrubber stages and arranged along the scrubber tower, the pump tank being connected directly to the corresponding ring-shaped fluid storage tank; and

a circulation pump connected to the corresponding pump tank at a level of each of the plurality of scrubber stages and arranged to feed, through a feed pipe present in the corresponding pump tank, fluid from the corresponding ring-shaped fluid storage tank at the bottom of the scrubber stage to spray beams arranged at the upper part of the scrubber stage for distribution over the cross-section of the scrubber in a direction against the up-wards gas flow,

wherein the separation trough is recessed within and surrounded by the ring-shaped fluid storage tank, and a length of the feed pipe is limited to a height of the scrubber stage.